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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 6662 Yasutaka Takabayashi OKI 302 C1 12/31/2003 10/748,198 **EXAMINER** 7590 05/20/2004 STERRETT, JEFFREY L Rabin & Berdo, P.C. Suite 500 ART UNIT PAPER NUMBER 1101 14th Street, N.W.

2838
DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    10/748,198   TAKABAYASHI, YASUTAKA
Jeffrey L. Sterrett 2838 . The MAILING DATE of this communication appears on the cover sheet with the correspondence address
The MAILING DATE of this communication appears on the cover sheet with the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).
Status
1) Responsive to communication(s) filed on <u>31 December 2003</u> .
2a) This action is <b>FINAL</b> . 2b) ⊠ This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4) Claim(s) 18-22 is/are pending in the application.
4a) Of the above claim(s) is/are withdrawn from consideration.
5) Claim(s) is/are allowed.
6)⊠ Claim(s) <u>18-22</u> is/are rejected.
7) Claim(s) is/are objected to.
8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9) The specification is objected to by the Examiner.
10)⊠ The drawing(s) filed on <u>31 December 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)
Paper No(s)/Mail Date <u>12/31/03</u> .  6) Other:

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- 1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 2. The drawings are objected to because boxes 3 and 4 in figure 2 are not labeled or shown as to their use or purpose. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 4. Claim 19 is objected to because line 2 makes little to no sense at all. Appropriate correction is required.
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
  - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 18, 19, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Heisley et al (US 6,333,623).

Heisley discloses a voltage regulator (56) comprising a series regulator (66 and 68) coupled to an output node (72) and supplied with a reference voltage (VREF) and a first voltage generated by dividing the voltage at the output node and a shunt type regulator (58) coupled to the output node and supplied with the reference voltage and a second voltage the same as the first voltage from the divided voltage at the output node.

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6. Claims 18, 19, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadanka (US 5,966,004).

Kadanka discloses a voltage regulator (100) comprising a series regulator (210 and 230) coupled to an output node (205) and supplied with a reference voltage (VREF) and a first voltage (VM) generated by dividing (255) the voltage at the output node and a shunt type regulator (220 and 240') coupled to the output node and supplied with the reference voltage and a second voltage the same as the first voltage from the divided voltage at the output node. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadanka.

Kadanka teaches a voltage regulator as recited by claims 20 and 21 except for specifying that the first and second voltages are different so that the series and shunt regulators have different outputs. It is noted that Kadanka also has designed the series and shunt regulators to have different outputs by adding an offset voltage source (290) between the reference voltage and the operational amplifier (240). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the voltage regulator of Kadanka by instead of altering the reference voltage provided to the operational amplifier by altering the second voltage provided to the operational amplifier by utilizing a voltage divider that instead provided two different voltages as the first and

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second voltages since comparing the same reference voltage to different voltages or comparing different reference voltages to the same voltage are obvious equivalents providing the very same results.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takabayashi (US 6,696,822) is cited to show the parent patent.

Wallace (US 5,608,312), Borden et al (US 5,864,227), and Baldwin et al (6,650,093) are cited to show voltage regulators old and known in the art at the time of the invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Sterrett whose telephone number is (571) 272-2085. The examiner can normally be reached on Monday-Thursday & 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Jeffrey L. Sterrett **Primary Examiner** Art Unit 2838

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